

WHAT IS CLAIMED IS:

1. In a DEX enabled vending machine having a vending machine controller with a DEX interface and a multi-drop-bus interface, an enabling device for enabling electronic payment for products dispensed from said vending machine and for communicating information between said vending machine and a remote computer, said Enabler comprising:
  - a wireless data network transceiver linked to said DEX interface;
  - a card reader for entering credit card account information; and
  - a micro-controller in communication with said transceiver and connected to said multi-drop-bus interface.
2. The vending machine according to claim 1, further comprising a display.
3. The vending machine according to claim 1, wherein said credit account reader is selected from the group consisting of: a magnetic swipe reader, a keyboard, a personal identification number pad, a microphone, and a bio-metric device.
4. The vending machine according to claim 1, further comprising at least one of a speaker and a microphone.
5. The vending machine according to claim 1, wherein said transceiver is operated on a wireless network selected from the group consisting of: a circuit switched cellular network, a packet radio network, narrowband PCS, broadband PCS, a CDPD network, a satellite network, a CDMA network and a TDMA network.
6. In a vending machine having a vending machine controller and an enabling device for enabling electronic payment for products dispensed from said vending machine and for communicating information between said vending machine and a remote computer, said Enabler comprising:

a wireless data network transceiver linked to an interface of said vending machine controller;

a card reader for entering credit card account information; and

a micro-controller in communication with said transceiver and said interface of said vending machine controller.

7. The vending machine according to claim 6, wherein said interface comprises a first data communications interface for communicating information between said vending machine controller and said transceiver and a second interface for communication between said micro-controller and said vending machine controller.

8. A system for managing information from a vending machine comprising:

a remote computer having a database for storing information obtained from a DEX enabled vending machine, said remote computer in communication with a computer network;

a wireless data network in communication with said computer network;

a DEX enabled vending machine including:

a vending machine controller for managing operation of the vending machine and having memory for storing information related to the operation of said vending machine and information related to at least one of the inventory of vended product and sales of the vended product;

a DEX interface for transferring audit data from said vending machine controller;

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a multi-drop-bus for connection of peripheral devices to  
said vending machine controller;

an Enabler device comprising:

a wireless data network transceiver linked to  
said DEX interface;

a card reader for entering credit card account  
information, said reader in communication with said  
transceiver; and

a micro-controller in communication with said  
transceiver and connected to said multi-drop-bus  
interface.

9. The system according to claim 8, further comprising a display.

10. A system for managing information from a vending machine comprising:

a remote computer having a database for storing information obtained  
from a vending machine, said remote computer in communication with a  
computer network;

a wireless data network in communication with said computer  
network;

a vending machine including:

a vending machine controller for managing operation of  
the vending machine and having memory for storing  
information related to the operation of said vending machine  
and information related to at least one of the inventory of

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vended product and sales of the vended product;

an interface for transferring data from said vending machine controller;

an Enabler device including:

a wireless data network transceiver linked to said interface;

a card reader for entering credit card account information, said reader in communication with said transceiver; and

a micro-controller in communication with said transceiver and said vending machine controller.

11. The system according to claim 10, wherein said interface comprises a first interface for communicating information between said transceiver and vending machine controller, and a second interface linking said micro-controller to said vending machine controller for transferring vend approval and vend denied information as a result of the input of a credit account for the purchase of vended product.
12. The system according to claim 11, wherein said first interface comprises a DEX interface and said second interface comprises a multi-drop interface.
13. A method for monitoring inventory in a vending machine comprising:  
  
providing a vending machine having a vending machine controller including a memory for storing transaction information, said vending machine capable of vending preloaded product having a unique identification from a known inventory of said product and having a predetermined selling price, wherein in response to a request from a buyer and upon tendering payment

equal to or greater than said predetermined selling price, said vending machine having the capability to create data representative of said unique product identification, and the time of any vending event, and method of payment of such event;

providing a communication link between said vending machine and a remote computer on a computer network via a wireless data network

creating a data record of all vending events,

storing a plurality of said data records in said memory;

transmitting said plurality of data records to said remote computer via said wireless data network.

14. The method according to claim 13, wherein said plurality of data records is transmitted to said remote computer via said wireless network in response to a request from said remote computer.
15. The method according to claim 13, wherein said plurality of data records is transmitted to said remote computer via said wireless network in response to a request from a service technician.
16. The method according to claim 13, further comprising processing said plurality of data records at said remote computer to produce an output representative of a vending history of said vending machine.
17. The method according to claim 16, wherein said vending history includes data related to credit transaction information.
18. The method according to claim 16, wherein said vending history includes data related to errors of said vending machine.

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19. The method according to claim 16, wherein said vending history includes a status of the inventory of said product in said vending machine.

20. A method for managing information from a vending machine comprising:

    sending a first request from a remote computer on a computer network to a remote vending machine, said request for vending machine data stored in a database in said vending machine and said first request is sent to said vending machine via a wireless data network;

    forwarding said data from said vending machine to said remote computer in response to said request.

21. The method according to claim 20, further comprising sending a second request from said remote computer to said vending machine after said data has been forwarded, said second request for clearing said database of said vending machine data.

22. A method for updating a product database in a remote vending machine comprising:

    providing a vending machine having a vending machine controller in communication with a wireless transceiver for communicating with a remote computer on a computer network via a wireless data network;

    sending a command from said remote computer to said vending machine, said command for changing writable fields of said database with new information;

    sending said new information from said remote computer; and

    storing said new information in said writable fields.

23. A method of settling a credit transaction from a point of sale device comprising:

    entering credit account information into a point of sale machine for

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conducting a purchasing transaction for a product and/or service;

authenticating said account information;

upon said account information being authentic, said method further comprises determining the availability of memory space to store transaction information necessary to settle said transaction with a credit company issuing said credit account;

storing said transaction information necessary to settle said transaction in said memory space when said memory space is available;

settling said transaction with said credit company at a predetermined later time.

24. The method according to claim 23, wherein transaction information necessary to settle said transaction comprises said credit account information, product and/or service purchased, and time of said purchase.
25. The method according to claim 24, wherein said time comprises a date.
26. The method according to claim 24, wherein said time comprises a date and time.
27. The method according to claim 23, wherein transaction information for a plurality of earlier transactions is stored in said memory space, and wherein settling of said transaction comprises forwarding said transaction information to a remote computer.
28. The method according to claim 27, wherein after said transaction information has been forwarded to said remote computer, said remote computer forwards necessary transaction information to said credit company via said computer network.
29. The method according to claim 23, wherein when said memory space is unavailable, settlement of said transaction with said credit company is conducted during said

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transaction.

30. The method according to claim 23, wherein said authenticating step comprises comparing said credit account information against a database of known numbering schemes for credit account numbers.
31. The method according to claim 23, wherein said authenticating step comprises comparing said credit account information against a database of lost or stolen account numbers.
32. The method according to claim 23, wherein said authenticating step comprises determining if said credit account information is expired.
33. The method according to claim 23, wherein said authenticating step comprises determining if said credit account has been used for purchases on said vending machine greater than a predetermined amount over a predetermined period of time.
34. The method according to claim 33, wherein said predetermined amount comprises a predetermined amount of money.
35. The method according to claim 33, wherein said predetermined amount comprises a predetermined number of product.
36. The method according to claim 23, wherein said later predetermined time comprises a time it takes until said memory space is unavailable.
37. A computer readable medium having computer-executable instructions for performing a method comprising:

sending a first request from a remote computer on a computer network to a remote vending machine, said request for vending machine data stored in a database in said vending machine and said first request is sent to said vending machine via a wireless data network;

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forwarding said data from said vending machine to said remote computer in response to said request.

38. A computer readable medium having computer executable instructions for performing a method for updating a product database in a remote vending machine comprising:

providing a vending machine having a vending machine controller in communication with a wireless transceiver for communicating with a remote computer on a computer network via a wireless data network;

sending a command from said remote computer to said vending machine, said command for changing writable fields of said database with new information;

sending said new information from said remote computer; and

storing said new information in said writable fields.

39. A computer readable medium having computer-executable instructions for settling a credit transaction from a point of sale device comprising:

entering credit account information into a point of sale machine for conducting a purchasing transaction for a product and/or service;

authenticating said account information;

upon said account information being authentic, said method further comprises determining the availability of memory space to store transaction information necessary to settle said transaction with a credit company issuing said credit account;

storing said transaction information necessary to settle said transaction

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in said memory space when said memory space is available;

settling said transaction with said credit company at a predetermined later time.

40. In a point of sale device having a controller and an enabling device for enabling electronic payment for purchases from said point of sale device and for communicating information between said point of sale device and a remote computer, said Enabler comprising:

a wireless data network transceiver linked to an interface of said controller;

a card reader for entering credit card account information, said reader in communication with said transceiver; and

a micro-controller in communication with said transceiver and said interface of said controller.

41. A system for managing information from a point-of-sale device comprising:

a remote computer having a database for storing information obtained from a point of sale device, said remote computer in communication with a computer network;

a wireless data network in communication with said computer network;

a point of sale device including:

a controller for managing operation of the point of sale device and having memory for storing information related to the operation of said point of sale device and information

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related to purchases of a product and/or service;

an interface for transferring data from said controller;

an Enabler device comprising:

a wireless data network transceiver linked to  
said interface;

a card reader for entering credit card account  
information, said reader in communication with said  
transceiver; and

a micro-controller in communication with said  
transceiver and said controller.

42. A method for managing information from a point of sale device comprising:

sending a first request from a remote computer on a computer network  
to a remote point of sale device, said request for at least one of transaction and  
telemetry data stored in a database in said point of sale device and said first  
request is sent to said point of sale device via a wireless data network;

forwarding said data from said point of sale device to said remote  
computer in response to said request.

43. A method of authorizing a credit transaction from a point of sale device comprising:

entering credit account information into a point of sale machine for  
conducting a purchasing transaction for a product and/or service;

forwarding said credit account information to a remote computer;

forwarding said credit account information from said remote computer

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to a credit card processor host to obtain a credit approval; and

transmitting said credit approval from said credit card processor host  
to said point of sale device via said remote computer.

44. The method according to claim 43, wherein said credit information is stored at said remote computer.
45. The method according to claim 43, further comprising settling said purchasing transaction with said credit card processor host by automatically forwarding a command for settling said transaction before a triggering event.
46. The method according to claim 45, wherein said triggering event comprises a predetermined time.
47. The method according to claim 43, further comprising settling said purchasing transaction with said credit card processor host by automatically forwarding a batch of a plurality of purchasing transactions to said credit card processor host before a triggering event.
48. The method according to claim 47, wherein said triggering event is a predetermined time.
49. The method according to claims 45, wherein said command is forwarded from said remote computer.
50. The method according to claims 47, wherein said command is forwarded from said remote computer.

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